IN THE CLAIMS

1. (currently amended) A method of screening for therapeutic agents useful in the treatment of a disease selected from the group consisting of cardiovascular diseases, cancer, dermatological diseases, gastroenterological diseases, metabolic diseases, inflammation, hematological diseases, respiratory diseases, neurological diseases and urological diseases in a mammal, comprising the steps of

i) contacting a test compound with a NPEPL1 polypeptide, ~~and~~

ii) detecting binding of said test compound to said NPEPL1 polypeptide, and

iii) determining if the test compound has an effect on a symptom of the disease in an *in vivo* assay.

2. (currently amended) A method of screening for therapeutic agents useful in the treatment of a disease selected from the group consisting of cardiovascular diseases, cancer, dermatological diseases, gastroenterological diseases, metabolic diseases, inflammation, hematological diseases, respiratory diseases, neurological diseases and urological diseases in a mammal, comprising the steps of

i) determining activity of a NPEPL1 polypeptide at a certain concentration of a test compound or in the absence of said test compound, ~~and~~

ii) determining the activity of said polypeptide at a different concentration of said test compound, and

iii) determining if the test compound has an effect on a symptom of the disease in an *in vivo* assay.

3. (currently amended) A method of screening for therapeutic agents useful in the treatment of a disease selected from the group consisting of cardiovascular diseases, cancer,

dermatological diseases, gastroenterological diseases, metabolic diseases, inflammation, hematological diseases, respiratory diseases, neurological diseases and urological diseases in a mammal, comprising the steps of

i) determining the activity of a NPEPL1 polypeptide at a certain concentration of a test compound, ~~and~~

ii) determining the activity of a NPEPL1 polypeptide at the presence of a compound known to be a regulator of a NPEPL1 polypeptide, and

iii) determining if the test compound has an effect on a symptom of the disease in an *in vivo* assay.

4. (withdrawn) The method of claim 1, wherein the step of contacting is in or at the surface of a cell.

5. (withdrawn) The method of claim 1, wherein the cell is *in vitro*.

6. (previously presented) The method of claim 1, wherein the step of contacting is in a cell-free system.

7. (withdrawn) The method of claim 1, wherein the polypeptide is coupled to a detectable label.

8. (previously presented) The method of claim 1, wherein the compound is coupled to a detectable label.

9. (previously presented) The method of claim 1, wherein the test compound displaces a ligand which is first bound to the polypeptide.

10. (previously presented) The method of claim 1, wherein the polypeptide is attached to a solid support.

11. (previously presented) The method of claim 1, wherein the compound is attached to

a solid support.

12-26. (canceled)